

The application

- 6 The application relates to a method and apparatus of converting voicemail sent to a mobile telephone to a text message. The claims have been amended during prosecution; there are two independent claims and a product by process claim, as of 03 November 2006, which read:

*“1. A method of providing voicemail to a mobile telephone, in which a caller initiates a voice call to the mobile telephone, but that call is diverted to a voicemail server, with the caller then leaving a voice message on the voicemail server; the method comprising the steps of:
(a) playing back the voice message to an operator;
(b) the operator intelligently transcribing the original voice message into a computer to generate a transcribed text message;
(c) sending the text message to the mobile telephone.”*

“16. A text message which has been transcribed from a voicemail and is provided to a mobile telephone using the method of any preceding claim 1-15.”

and

*“17. An apparatus for providing voicemail to a mobile telephone, in which a caller initiates a voice call to the mobile telephone, but that call is diverted to a voicemail server, with the caller then leaving a voice message on the voicemail server; the apparatus operable to:
(a) play back the voice message to an operator;
(b) generate a transcribed text message using input from the operator intelligently transcribing the original voice message into a computer;
(c) send the text message to the mobile telephone.”*

- 7 New claims were presented for consideration at hearing, with changes highlighted:

*“1. A method of providing voicemail to a mobile telephone, in which a caller initiates a voice call to the mobile telephone, but that call is diverted to a voicemail server, with the caller then leaving a voice message on the voicemail server; the method comprising the steps of:
(a) playing back the voice message to an operator;
(b) the operator transcribing the original voice message into a computer to generate a transcribed text message, **the transcribed text message not being a word for word transcription of the original voice message but instead a succinct, intelligent rendering of the actual message;**
(c) sending the text message to the mobile telephone;
(d) **displaying the text message on the mobile telephone.”***

and an equivalent apparatus claim

“ An apparatus for providing voicemail to a mobile telephone, in which a caller initiates a voice call to the mobile telephone, but that call is diverted to a voicemail server, with the caller then leaving a voice message on the

voicemail server; the apparatus operable to:
(a) play back the voice message to an operator;
(b) generate a transcribed text message using input from the operator intelligently transcribing the original voice message into the computer, the transcribed text message not being a word for word transcription of the original voice message but instead a succinct, intelligent rendering of the actual message;
(c) send the text message to the mobile telephone for display on the mobile telephone.”

The law

- 8 In his final report, the examiner has argued that the claimed invention relates to subject matter excluded from patentability under section 1 of the Act, in particular to a method for performing a mental act under section 1(2)(c). The relevant parts of the section read:

1(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say -
(a) the invention is new;
(b) it involves an inventive step;
(c)
(d) the grant of a patent for it is not excluded by subsections (2) and (3) below;

and references in this Act to a patentable invention shall be construed accordingly.

1(2) It is hereby declared that the following (among other things) are not inventions for the purposes of this act, that is to say anything which consists of -
(a)
(b)
(c) a scheme, rule or **method for performing a mental act**, playing a game or doing business, or a program for a computer;
(d)

but the foregoing provision shall prevent anything from being treated as an invention for the purposes of the act only to the extent that that a patent or application for a patent relates to that thing as such.

- 9 As near as is practicable, these provisions have the same effect as Article 52 of the European Patent Convention (EPC) to which they correspond by virtue of being so designated in Section 130(7).

Interpretation

- 10 The current approach to assessing patentability under section 1(2) is set out in the Court of Appeal's judgment in *Aerotel/Macrossan*¹, and sets out a four-step

¹ *Aerotel Ltd v Telco Holdings Ltd and others and Macrossan's Application* [2006] EWCA Civ 1371, [2007] RPC 7

test:

- 1) properly construe the claim;
- 2) identify the actual contribution;
- 3) ask whether it falls solely within the excluded subject matter;
- 4) check whether the actual or alleged contribution is actually technical in nature.

11 Mr. Langley acknowledged that this was the test now being used, but he was concerned that it should be applied with due regard to previous Court of Appeal decisions in *Merrill Lynch*² and *Fujitsu*³.

The arguments

12 Much of the argument in Mr. Langley's written submission relates to application of the technical contribution test of *Fujitsu*, although he also touches on aspects of *Merrill Lynch*. He accepted at hearing that this was now history, and that *Aerotel/Macrossan* required me to apply the four step test, but it is worth commenting on some of his arguments.

13 Although he recognizes that the Court of Appeal considered the four step test as a re-formulation of *Fujitsu*, with the steps in a different order, he questions whether that is really so. In doing so he takes the view that there is a significant divergence of *Aerotel* over *Fujitsu* and that, because *Fujitsu* remains a binding precedent, we must accept that a technical aspect can transcend an invention into the patentable.

14 A major thrust of his argument is that it must be open to an applicant to use the *Fujitsu* approach and that the UKIPO should be free to choose between alternative approaches.

15 Specifically he argues, "*The Aerotel 4 part test is wrong and contrary to authority only if it is used by the Patent Office to the exclusion of binding precedent in Fujitsu. The Patent Office must also allow applicants to operate the Fujitsu 'technical contribution' test (i.e. a technical contribution alone can justify patentability; there is no need to ask whether the result itself is excluded 'as such' and every reason in logic to avoid doing so). Further, it must also allow applicants to operate a technical 'aspect' justification for patentability. What is not open to the Patent Office is to treat the 'technical contribution' test as optional and subservient to the enquiry as to whether a contribution relates to a prohibited item 'as such' (i.e. step 3 in the Aerotel test). That is wrong in law and contrary to all binding precedent. Binding precedent in Fujitsu mandates that step 3 not only can be answered by asking whether there is a technical contribution or aspect, but in fact should be.*"

16 I cannot accept that analysis. The Court of Appeal in *Aerotel/Macrossan* fully discussed previous approaches, which it summarized as the 'Contribution'

² Merrill Lynch's Application [1989] RPC 561

³ Fujitsu Ltd's Application [1997] RPC 608

approach, the 'Technical Effect' approach and the 'Any Hardware' approach. In doing so it fully considered, and wholly took account of, *Fujitsu* and *Merrill Lynch* in its deliberations. It considered the four part test in relation to the statutory test and decided it was a structured and more helpful way of re-formulating the statutory test. It is consistent with the principles enunciated in *Merrill Lynch* and a re-formulation in a different order of the *Merrill Lynch* test (paragraph 41). It is a re-formulation of the approach adopted in *Fujitsu* and asks the same questions, but in a different order (paragraph 47). Further, they concluded that a contribution which consists solely of excluded matter will not count as a technical contribution (paragraph 47). The UKIPO is not free to choose which approach to take and I am bound to follow the four step test.

The four step test

- 17 In applying the first step, I do not think the construction of the claims presents any difficulty; indeed, there has never been an issue between the examiner and the applicant in this respect.
- 18 For the second step it is helpful to consider what the Court of Appeal meant by the actual contribution; they said, at paragraphs 43 & 44, "What has the inventor really added to human knowledge perhaps best sums up the exercise. The formulation involves looking at the substance not form – which is surely what the legislator intended." and "In the end the test must be what contribution has actually been made, not what the inventor says he has made."
- 19 Following *Aerotel/Macrossan*, it appears to me that, having regard to the problem to be solved, how the invention works and what its advantages are, the important question is whether the contribution over and above the prior art is within excluded territory. If the contribution lies solely in excluded matter, identification of a technical advance does not resurrect the invention.
- 20 Previous argument on the application has contrasted the invention with devices and practice in the prior art, emphasizing that the invention, when compared with an automated system, 'actually works' and that there has been significant commercial take-up. As the examiner has already pointed out, it may arguably and subjectively work better than what has gone before and it may well have commercial benefit, but such concepts here provide no assistance in assessing what the actual contribution is.
- 21 The witness statement presented to me is from Dr. Patrick Naylor, a senior lecturer in the Communications and Signal Processing research group at Imperial College, London. It is clear to me that Dr. Naylor's background and current research interests would have him be regarded as an expert in speech processing as used in the field of the invention and I acknowledge his views on the technical aspects in this area and what he considers the invention might contribute to speech processing. However, I do not read his witness statement as suggesting, by any means, that he considers his expertise qualifies him to be an expert in assessing the actual contribution of an invention, indeed expressly not so.

- 22 Dr. Naylor considers that the contribution to the art is not the decision to use human operators, which Mr. Langley supported at hearing, and I agree. He views the invention as insightful, interesting, unusual, powerful, valuable, and a far from trivial concept in a computer dominated area. That may be so, but none of those concepts are of any use in determining the actual contribution, since the contribution cannot be defined by abstract benefits. Dr. Naylor is also of that view and believes that the contribution represents a non-accurate, non-verbatim conversion which is nevertheless semantically correct and faithful to the original message. Mr. Langley's view, reflecting that of Dr. Naylor, was that what had been added to the stock of human knowledge is not the replacement of the automated system by a human, but that you don't want accurate transcription; the contribution was the semantic conversion of the voicemail message.
- 23 The closest prior art in this area, as accepted at hearing, is Telia (WO98/05154) which demonstrates a caller to a mobile telephone leaving a voice message on the voicemail server, a computer converting the voicemail into a text message, the text message being sent back to the mobile telephone where it will be displayed. The hardware used in all of this, as with the current invention, is entirely conventional.
- 24 Consequently, what is there in the current invention over and above this known prior art which might contribute to the stock of human knowledge? It is clear to me that the contribution provided by the invention is that, instead of a computer converting the voicemail message, a human operator listens to the message and intelligently transcribes it to generate a text message, additionally in the claim proposed at hearing as a succinct, intelligent rendering rather than a word for word transcription.
- 25 The third step is to test whether the identified contribution lies solely within an excluded category.
- 26 In his submission, Dr. Naylor suggested that there is a new layer in the information processing hierarchy: instead of 'voice -> text' there is 'voice -> meaning -> text'. Mr. Langley argued that the situation in this case is similar to that in *Aerotel*, in that the replacement of the automated system by a human operator is an additional new technical architecture in the network of computers. I do not agree. There is no new layer of technology here; it is a replacement of an item of technology in an existing layer with an alternative which performs, albeit in a different way, the same function – a different item in the same layer which converts a voice message into text. Instead of a layer which uses automated transcription you use a human operator to convert a voice message to text. Moreover, the aspect which Dr. Naylor suggests is new to this layer is a human's interpretation of the meaning of a message, a purely mental act.
- 27 A human operator, listening to a voicemail message and transcribing that message into text form is a mental act. The changing by that human operator of a message so that it is not a word for word transcription but instead a succinct intelligent rendering of the message is also purely a mental act which, I might add, secretaries have been performing for generations.
- 28 Further, in considering substance over form, the presence of conventional

hardware elements, operating in a conventional manner, in a claim does not change the contribution. In this case, the elements of the hardware system of the apparatus claim are not new nor, as a whole, is the way in which they are linked. The independent apparatus claim must therefore also fail.

- 29 Having come to this conclusion it is unnecessary to proceed to step 4 to consider whether the contribution is actually technical in nature. Technical advances falling solely within one of the excluded categories are not enough to allow an invention to pass the third step of the test. Consequently, it is not necessary to apply the fourth step if the invention has failed the third.
- 30 Having found the invention to be excluded, there is no need to for me consider whether it includes an inventive step.

Conclusion

- 31 I have found that the invention relates to a method for performing a mental act and is excluded from patentability under Section 1(2). I have been unable to find anything which could form the basis of a patentable invention in the amended application. I therefore refuse the application under section 18(3).

Appeal

- 32 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

John Rowlatt

Deputy Director acting for the Comptroller